



ENERGY EFFICIENCY EXISTING SHIPS INDEX (EEXI) & CARBON INTENSITY INDICATOR (CII)

In June 2021, IMO's MEPC 76 adopted amendments to MARPOL Annex VI, as part of its short-term measures under the IMO GHG Reduction Strategy. Through these amendments, new regulations have been introduced on Energy Efficiency Existing Ships Index (EEXI) and Carbon Intensity Indicator (CII).

Energy Efficiency Existing Ships Index (EEXI)

- Technical Measure
- Index reflecting the energy efficiency of an existing ship design
- One time approval demonstrating Attained EEXI \leq Required EEXI
- Measures to improve EEXI include Engine Power Limitation (EPL), installation of Energy Saving Device (PBCF, duct around propeller, vortex generator fins etc), bulbous bow, optimized propeller, alternative fuel

Carbon Intensity Indicator (CII)

- Operational Measure
- SEEMP to be modified to include methodology to calculate CII
- Annual verification based on IMO DCS data
- Ships will be assigned operational carbon intensity rating A, B, C, D or E
- Ship rated D for 3 consecutive years or rated as E to develop a plan of corrective actions to achieve the required annual operational CII

Applicability

Following ship types are required to comply with EEXI (for ships of 400 GT and above) and CII (for ships of 5000 GT and above)

- Bulk Carrier
- Tanker
- Combination Carrier
- Containership
- Cruise Passenger Ship
- Gas Carrier
- General Cargo Ship
- LNG Carrier
- Refrigerated Cargo carrier
- Ro-Ro Cargo Ship
- Ro-Ro Cargo Ship (Vehicle Carrier)
- Ro-Ro Passenger Ship



Services for Compliance

Through these new services IRS will assist shipowners and managers in assessing the EEXI and CII of their vessels and achieve compliance.

- Web Based Electronic tools to calculate EEXI and prepare EEXI Technical File
- Verification of EEXI Technical File and Issuance of International Energy Efficiency (IEE) Certificate
- Verification of SEEMP and Issuance of Confirmation of Compliance
- Calculation of CII
- Assigning CII Rating and Issuance of Statement of Compliance
- Verification of energy saving measures using numerical methods such as Computational Fluid Dynamics (CFD) analysis
- Trainings and workshops to create awareness about the new regulations for shore and ship staff

Key Timelines

- The amendments will enter into force on 1st November 2022
- Compliance to EEXI requirements by the annual, intermediate or renewal IAPP survey whichever comes first on or after 1 January 2023.
- Enhanced SEEMP and Confirmation of Compliance to be available onboard by 1st Jan 2023 incorporating method to calculate CII
- Calculating Attained Annual Operational CII by 31st Dec 2023 and each year thereafter
- Reporting the Attained Annual Operational CII for verification by 31st March 2024 and each year thereafter



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